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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,195	09/10/2003	Kenichiro Uda	56937-089	3242

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EXAMINER

ROSSOSHEK, YELENA

ART UNIT PAPER NUMBER

2825

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,195

Applicant(s)

UDA, KENICHIRO

Examiner

Helen Rossoshek

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/03/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Application 10/658,195 filed 09/10/2003 and amendment filed 01/03/2006.

2. Claims 1-13 are pending in the Application. Claim 13 has been added to the Application.

3. Applicant's arguments with respect to the rejection(s) of claim(s) 1-12 under 35 USC § 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Objections

4. Claims 1-13 are objected to because of the following informalities:

claims 1-12 have insufficient antecedent basis issue, as was stated in the previous office action. First indefinite article "A" has to be replaced by --The--

claims 1-12 line 1 after "design of" delete "an" insert --the--

claim 1 has insufficient antecedent basis issue, such as "**the** pitches between ..."

claim 5 line 2 after "wherein" delete "the"

claims 7-12 are formulated unclear as to term "smaller", is it related to width or length of each of the plurality of outgoing power lines?

claim 13 has insufficient antecedent basis issue in the second limitation, such as "**the** pitch between ..."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1-4 and

6. Claims ¹⁻⁴₁-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosegawa et al. (US Patent 6,028,580).

With respect to claim 13 Kosegawa et al. teaches a structure of a power supply path utilized in design of an integrated circuit within integrated circuit design (abstract), wherein at least a power supply path on a power supply side of a high potential and at least a power supply path on a power supply side of a low potential are provided opposite each other as shown on the Fig. 1(a) a high potential power source V_{dd} 15 and a low potential power source V_{ss} 16 disposed on a opposite sides from each other (col. 8, ll.29-30), and wherein the power supply path on the power supply side of the high potential and the power supply path on the power supply side of a low potential each comprise: a main power line within main line 15a disposed on the power source line 15 on the side of the high potential power source V_{dd} (col. 8, ll.58-612) and main line 16a disposed on the power source 16 on the low potential power source V_{ss} (col. 9, ll.3-4) and a plurality of outgoing power lines branching off from the main power line within plurality of branched wiring sections 15b (outgoing power lines) as shown on the Fig. 1(a) outgoing from main power line 15 (col. 8, l.67; col. 9, ll.1-2), wherein the pitch between the main power line of the power supply path on the power supply side of the

high potential and the main power line of the power supply path on the power supply side of the low potential is set to be longer than the sum of the length of an outgoing line of the power supply side of the high potential and the length of an outgoing line of the power supply side of the low potential provided opposite said outgoing line of the power supply side of the high potential as might be seen on the Fig. 1(a) the distance (pitch) between main power source line 15 on the side of the high potential power source V_{dd} and main power source line 16 on the side of the low potential power source V_{ss} composed of the sum of two length of outgoing lines 15b and 16b, wherein 15b is branched outgoing line from the high potential power source V_{dd} and 16b is branched outgoing line from the low potential power source V_{ss} plus sum of width of the output line 17 and length of its branches 17b, which makes the distance between two main power lines 15a and 16a of the power supply path greater than sum of length of branches 15b and 16b.

1-4,
With respect to claims $\overset{1-4}{\underset{\wedge}{7}}$ -12 Kosegawa et al. teaches:

Claim 1: wherein pitches between adjacent outgoing lines of the plurality of branched outgoing lines are set so as to be equal to each other as shown on the Fig. 1 (a) branched outgoing power lines 15b are disposed symmetrically on the main power line 15a, i.e. the distances between branched outgoing power lines 15b are equal;

Claim 2: wherein branching positions of the plurality of outgoing power lines of the power supply path on the power supply side of the high potential correspond to branching positions of the plurality of outgoing power lines of the power supply path on the power supply side of the low potential in the longitudinal direction of the power

supply paths as shown on the Fig. 1(a), wherein branching positions of the outgoing power lines 15 b of the power supply path 15a on the high potential 15 correspond to the branching positions of the outgoing power lines 16 b of the power supply path 16a on the high potential 16;

Claims 3 and 4: wherein lengths of the respective plurality of outgoing power lines are set so as to be equal to each other in both the power supply paths on the power supply sides of the high potential and the low potential, respectively as shown on the Fig. 1(a), wherein outgoing power lines 15b on the power supply sides of the high potential and outgoing power lines 16b on the power supply sides of the low potential are equal;

Claims 7-12: wherein widths of the respective plurality of outgoing power lines are equal to each other and set so as to be smaller than distances between the adjacent outgoing power lines of both the power supply paths on the power supply sides of the high potential and the low potential, respectively as might be seen on the Fig. 1(a) the length and width of the outgoing power lines 15b and 16b are smaller than distances between them on both sides of the power main lines 15a and 16a, which are high potential and low potential respectively, wherein their width has arranged with certain relationship with the size of the element, to which power is supplied with the consideration of the design rules (col. 9, ll.37-40).

Allowable Subject Matter

7. Claims 5, 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims. The prior art of record does not teach a structure of a power supply path in the design of an integrated circuit, wherein lengths of the plurality of outgoing power lines of the power supply path on the high potential are set as to be longer than length of the plurality of outgoing power lines of the power supply path on the low potential.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Rossoshek whose telephone number is 571-272-1905. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Helen Rossoshek
AU 2825


JACK CHIANG
SUPERVISORY PATENT EXAMINER